POPULATION AGEING AND ITS IMPLICATIONS FOR THE QUALITY OF LIFE WITH SPECIAL REFERENCE TO MALAYSIA

BY

DR. CHAN KOK ENG,
GEOGRAPHY DEPARTMENT,
ARTS AND SOCIAL SCIENCES FACULTY,
UNIVERSITY OF MALAYA.

POPULATION AGEING AND ITS IMPLICATIONS FOR THE QUALITY OF LIFE WITH SPECIAL REFERENCE TO MALAYSIA.

by

Dr. Chan Kok Eng,
Geography Department,
Arts and Social Sciences Faculty,
University of Malaya.

INTRODUCTION

"Age, I do abhor thee, youth, I do adore thee," thus remarked William Shakespeare (The Rape of Lucrece) several centuries back. This rather youth predisposed bias and unflattering estimation of old age no doubt prevails till today and explains the proliferation and success of advertisements touting such beauty or health enhancing products as cosmetics and pharmaceuticals as well as aerobic and other exercise regimens aimed at not only rejuvenating health but also looks. The antagonistic view of ageing is not strange if we consider that many changes a person encounters in growing old are not always pleasantly greeted. Some of these changes are physical, observable and measurable while others are of a qualitative and sometimes not so distinguishable character. Such qualitative changes are partially related to the physical changes that come about with old age, e. g. failing health and other physiological changes related to advancing years.

Further, age related shifts occur in regard to an ageing individual's roles, social and economic status. These require adjustments and socialization that could be stressful. In contrast to gains, which help to anchor the individual in the social structure, losses in status and roles are generally detrimental to the individual, sometimes leading to the severance of the links between the individual and the social structure. The greater the sense of personal loss of the individual, the more difficult it is to make the transition in roles and to adapt to change generally.

Whether physical or non-physical, changes experienced in growing old, could directly and indirectly affect the person's quality of life, and often adversely.

However, most people do not live in isolation. Rather, they are found and operate within larger social units, such as families as well as larger extra family units. Hence, ageing is not purely a personal concern of limited significance to particular individuals directly affected by ageing, but rather it has wider and deeper ramifications for society at large.

Ageing trends.

To assess the situation as affecting Malaysia, it is

essential to review levels and demographic trends relating to ageing and their implications for the aged and society at large in terms of the quality of life.

In Malaysia, as in several other developing countries since the 1970s, despite a population that may be described as youthful 1, there are unmistakable signs of ageing, as conventionally denoted by a steadily rising proportion and number of elderly persons, whether defined by an age cut off of 60 or by a more universally accepted demographic measure of 65 years.2 In the period 1970 to 1980, for Malaysia as a whole, the proportion of older persons aged 60 rose from 5.2 to 5.7 % while those aged 65 and older increased from 3.1 to 3.6 (see Table 1) while recently released figures for Peninsular Malaysia alone showed that the respective percentages were 5.9 and 3.8 in 1984 (Norman and Quah,1986) compared to 5.6 and 3.7 respectively in 1980. The proportion of aged persons in the population is expected to increase and by the year 2030, assuming that current demographic trends prevail, persons aged 60 and older could form 15.5 % of Malaysia's total population and those aged 65 and older comprise 9 % , while the total population median age stands at 32.1 years (Masitah, 1985).

Nevertheless, at the present time the percentage of aged persons has not yet reached or even come close to the levels of more developed Western countries and Japan (Table 2). This is largely due to the fact that demographic transition in Malaysia has not occurred to the same extent, or in the same manner as in the more developed countries which were characterized by not only mortality reduction (reflected in much higher average life expectancies) but also fertility decline to alarmingly low levels sometimes resulting in negative crude rates of natural increase (Table 2). In Malaysia, especially in more heavily populated and developed Peninsular Malaysia, mortality has also declined to impressive levels while average life expectancy at all ages for both sexes has improved.3 There has also been a decline in fertility, which is a more significant determinant of demographic ageing than mortality (cf. Coale, 1964).

Percentage aged 60 and aged 65 and older

State	1970		1980	
	60&	65&	60&	65&
Johor	5.08	3.07	5.75	3.81
Kedah	5.28	3.12	6.27	3.89
Kelantan	6.21	3.82	5.36	3.39
Melaka	5.76	3.51	6.70	4.88
Negri Sembilan	5.60	3.30	6.48	4.38
Pahang	5.03	2.90	4.76	3.12
Pulau Pinang	5.86	3.52	5.58	4.28
Perak	5.50	3.27	6.46	4.18
Perlis	6.76	4.10	7.55	4.61
Selangor	4.56	2.68	6.72	3.06
Terengganu	5.66	3.22	6.14	3.81
Wilayah Persekutuan	-	-	4.55	2.97
Peninsular Malaysia	5.34	3.18	5.58	3.66
Sabah	3.40	2.05	3.58	2.01
Sarawak	4.95	2.84	5.72	3.50
Malaysia	5.17	3.07	5.67	3.62

(Source: Computed from 1970 and 1980 censuses)

Table 1 : Percentage of total population aged 60 and older, and aged 65 and older, state and nation, Malaysia, 1970 and 1980.

Life Expectancy at Birth

Country	% 65	Males	Females	C.R.N.I.('000)
Australia	9	71.0	77.9	8.5
Canada	9	71.2	78.7	8.0
France	14	70.6	78.7	3.5
Fed. Rep. of Germany	15	70.0	76.8	-2.0
Japan	9	74.0	79.4	6.8
Netherlands	12	72.6	79.3	3.6
New Zealand	9	70.3	76.7	7.7
Sweden	16	72.8	79.0	0.1
United Kingdom	15	71.2	77.8	1.1
United States	11	70.3	78.0	6.9
U.S.S.R.	10	66.5	75.4	4.5

(Source: Nortman, 1982).

Table 2 : Percentage aged 65 and older, male and female average life expectancy at birth, crude rate of natural increase per thousand, selected more developed countries, ca. 1980.

The trend of falling fertility in Malaysia is clearly seen in a decrease of the total fertility rate (TFR) per woman of 6.69 in 1960, 5.91 in 1970 and 4.26 in 1980 (United Nations, 1985). In Peninsular Malaysia, a slight decline occurred through the early 1980s from a TFR of 3.9 to 3.8 between 1980 and 1984, although a slight upturn was noted in 1984 among Malay women who reported a TFR of 4.7 against a previous lower limit of 4.3 in 1978 (Normah and Quah, 1986). However, it is not yet possible

to determine whether this development heralds a reversal of the previous trend of fertility decline, and furthermore it was confined to the Malay sector of the population. Even among the indigenous groups in East Malaysia, signs of fertility decline, although imprecise, are evident (Normah and Quah, 1986).

If ageing is measured by other indicators such as median age of the population, again the trend towards an older population in Malaysia between 1970 and 1980 clearly emerges (Table 3).

It may also be observed that,in consequence of higher fertility and mortality, the East Malaysian states of Sabah and Sarawak registered lower median ages and also lower percentages of total population aged 60 or 65 and older than most of their Peninsular Malaysian counterparts and Peninsular Malaysia as a whole.

State	Median age of population	
	1970	1980
Johor	16.28	18.65
Kedah	17.64	19.35
Kelantan	18.09	17.86
Melaka	16.54	19.02
Negri Sembilan	16.33	18.66
Pahang	17.14	18.32
Pulau Pinang	18.35	21.75
Perak	17.25	19.11
Perlis	19.48	21.94
Selangor	18.08	20.43
Terengganu	17.28	17.93
Wilayah Persekutuan	-	22.03
Peninsular Malaysia	17.45	19.74
Sabah	16.50	18.26
Sarawak	16.91	18.47
Malaysia	17.32	19.66

(Source: Computed from 1970 and 1980 censuses)
Table 3 : Median age of total population, state and national, Malaysia, 1970 and 1980.

Further to the indications that elderly people will feature more prominently in Malaysia's social demography of the future is the fact that the the youthful and middle-aged population cohorts of today will become the aging population of tomorrow. As some of these cohorts were the legcay of past baby booms, most notably in the post-war period, this means that the number of older persons will be sharply on the increase over time, due to the increasing size of each successive cohort. 4 Thus, the survivors of the first of the baby boom cohorts, for example

those born between 1945-1950, who will be entering the ranks of those aged in about another 20 years time will be several times larger than, say, the 1980 cohort aged 60-64. This is an important point that mus be noted and emphasized with regard to population ageing not only in Malaysia but also in other developing countries. In such countries, fertility decline may not have kept pace with mortality decline, and ,in percentage and median age terms, ageing may not appear to be as advanced as in the more developed countries, perhaps a reason for the greater concentration of official attention on younger and more economically productive sections of the population than on the aged. Nevertheless, the failure to fully appreciate the prospective marked numerical growth of the older population sgements despite relatively small percentage increases in the elderly population is serious. It could promote a false sense of complacency and lack of measures to ensure the quality of life of the old.

IMPLICATIONS FOR THE QUALITY OF LIFE

If the quality of life is approximated with general well-being either at a collective societal level or at the family or individual level, ageing does have a direct or indirect bearing on the quality of life.

Ageing dependency.

In the first place, although not every aged person has to rely or depends on others to the same extent, the burden of the support and care of the aged by others in the physically and economically more active age groups generally grows as the population ages. If we use a simple measure of aged dependency in terms of the rate per thousand of of persons aged 65 and older to those in the economically active ages, 15-64 years, the aged dependency burden has increased since 1970 as indicated by the 1980 figures for Malaysia as a whole and in almost every state.5

Health Care and status

The increase in aged dependency, if it is sustained over time, has serious implications especially from the viewpoint of old age health care. This is because the old are in more need of health care than any other segment of the population. Not only do the elderly have more chronic ailments than the do the young, but also their illnesses tend to be more severe and they take longer to recover. The multiplicity of severe health problems faced by the elderly in general occurs at a time when their physical health and earning capacities have been diminished. Family support systems could prove inadequate to cope with the rising and heavy costs of medical care except in the case of the minority who are well-to-do. Thus, at a time when there is a conscious shift attempted by even so-called welfare systems in the Western countries to lessen the burden of the state in the support and care of the elderly, more and more of the elderly are increasingly forced to rely on the state. Such

a reliance requires a degree of integration in health and social approaches affecting all areas of geriatrics and this taxes and may even be more than the existing socio-medical systems can support. As their numbers and proportion increase, their needs will also intensify. Failure to provide adequate health care for the elderly in terms of quantity and quality will certainly affect their quality of life. In a capitalistic or market oriented system in which are found considerable socio-economic disparities among various sectors of the population, and privatization of medical services is now being emphasized, as is the case in Malaysia, there is a real danger that the poor amongst the aged will face unequal access to the health care facilities. Indeed, despite significant strides in improving health standards in Malaysia since 1970 and the impressive although not indefinite lowering of mortality among the elderly below 80 years of age, 6 differences in old age mortality along

State	Elderly Dependency Rate per thousand. 1970	1980
Johor	63.76	67.11
Kedah	63.14	66.87
Kelantan	78.44	76.11
Melaka	74.52	79.33
Negri Sembilan	72.10	79.00
Pahang	59.85	57.39
Pulau Pinang	65.55	66.46
Perak	67.45	75.25
Perlis	80.02	76.99
Selangor	51.88	51.71
Terengganu	58.54	71.12
Wilayah Persekutuan	-	46.24
Peninsular Malaysia	64.63	
Sabah	42.70	40.51
Sarawak	59.77	63.97
Malaysia	62.86	66.18

(Source: Computed from 1970 and 1980 censuses)
Table 4 : Elderly dependency rate per thousand, individual state and national, Malaysia, 1970 and 1980.

socio-economic lines will probably continue for long as there is lack of more equitable redistribution of income and other socio-economic amenities and opportunities in the country.

Though it is true that old age does bring with it increasing disability, medical, social and psychological, there is scope to ensure that the elderly continue to enjoy reasonable standards of health and activity as part of maintaining their quality of life. Such a move would considerably lessen the problems to themselves, their immediate families as well as the state. It could be attained by stressing preventive aspects of health and not merely curative measures alone, usually the case at the moment in most countries, including Malaysia.

Economic status

The health status and hence quality of life of the aged would not only be affected by the health amenities available to them, but also by their economic status. Economic deprivation in old age could among other things lead to homelessness, inadequate or substandard shelter, problems of malnutrition and resulting increased morbidity and shortened life expectancy. But where the aged have economic resources these are usually limited to aid given partly or fully by their children or other family members or on their own savings or investments. The scope for improving old age security in Malaysia is certainly

very considerable for only the Employees Provident Fund (E.P.F.) can claim relative universal coverage. Even then, there is still some uncertainty regarding the E.P.F.'s status and role as an old age security scheme, as shown in the recent government decision to relax withdrawal conditions for the purchase of low cost homes. Furthermore, at the present time the Fund excludes certain low income worker categories e.g. hawkers, fishermen and construction workers. At the present time, too, and conceivably for some time to come, the limited working life of many employees in this country which continues to observe an official retirement age of 55 years for men and 50 for women undoubtedly restricts the scope and volume of old age savings which further suffer from an inevitable erosion in value over time due to inflation. At the same time, since the average life expectancy in the older age groups has improved as mortality declines among the more 'youthful' aged, the continued imposition of the present retirement ages prematurely causes this group of persons to be disengaged from the labour force, spend many more years in retirement or in non economic activity than did their predecessors under conditions of lower old age life expectancy and before the formalization of labour laws, and to become economically dependent on public funds (in the case of the pensionable) or on others if they are unable to provide for themselves after retirement. Further, although there are some who opt out of the labour force for various reasons, for others employment or work may be a meaningful if not always economically beneficial exercise. Rigidly enforced compulsory retirement ages for those physically fit and willing to continue in the labour force, either part-time or full, could corrode their sense of self worth and lead to various psycho pathological problems. It is certainly worth considering an increase in economic activity rates of older persons not only for the reasons noted but also because this could offset or even reverse the negative effects of population ageing. As noted in the Vienna International Plan of Action on Aging, "the slowly expanding lifespan of the population, even in developing areas, constitutes a yet hidden resource for national economies" (Petersen, 1984). Increasing prolongevity together with improved health of older persons in Malaysia could be constructively utilised as an important human resource for development, if policies are implemented aimed at harnessing the skills and resources of the elderly, while considering also the contribution and needs of younger members of the work force. In this manner, there would be a reduction in the burdens of ageing dependency which would then be transformed into an impetus for Malaysia's economic growth.

Environment and living arrangements

The kinds of places where people live can be important in affecting their quality of life. As the objective environments and their attributes in different locations often differ markedly, e.g. rural versus urban, slums or squatter settlements versus upper class neighborhoods, commercial-industrial districts versus suburban neighborhoods, so too the degree to which a par-

ticular place of residence may satisfy various human needs, ranging from basic life supporting needs e.g. security and sanitation, to more complex social and self-realising needs. The economic, health,social and psychological statuses may indeed vary according to where a person lives (Lawton, 1980). Those places where the elderly are able to realize their needs more easily and adequately would undoubtedly contribute towards their well-being and their quality of life as opposed to those which do not. Thus the quality of life of the elderly could change with residence, especially if the change is accompanied by drastic changes in living arrangements. Although changes in one's residence could occur any time in one's life, late life environmental changes could severely affect the health status of the elderly, leading to higher mortality than among those who did experience such changes (Hickey, 1980). Late life changes in residence could occur such as if the aged were forced by circumstances to leave familar surroundings and established social networks, such as informal family support systems, for more impersonal and less familar institutional or semi-institutional dwellings.

The tendency for the elderly to experience changes in living arrangements becomes more pronounced in a society in which the adult young tend to leave their parental households to establish their own independent households. Some of these may not be too drastic or lower their quality of life. They may even be viewed favourably by the old themselves, especially if they themselves have sufficient financial resources, are in reasonable health and able to maintain their independence without risking isolation from their family members, some of whom could be staying nearby, visiting them frequently and exchanging help. Indeed, it must not be assumed that all aged persons need or desire to live with their other family members. Family co-residence does not always ensure inter-generational harmony as there are bound to be points of conflict stemming from inter-generational differences in life-styles, values and attitudes. Nor does co-residence mean that the aged would enjoy a reasonably high standard or quality of life ; some studies , for instance, have cast doubt on the generally held belief that the elderly are always better off in an extended family situation (e.g. Moraitis, 1978). And, it should be noted that the sense of independence between adult children and their aged parents in Western situations did not evolve overnight but rather over several decades in keeping with other social changes that caused a shift in some of the traditional family functions of looking after the sick and the aged to the state. Thus, the sense of personal loss or isolation and the inability to adjust would probably be more acute among most aged persons in the context of swiftly westernizing and modernizing Malaysia as these individuals are probably much less conditioned to living independently than their Western counterparts.7

However, at times, there could be advantages in the form of protection for the elderly, and thus preventing the serious

impairment to their quality of life, although they may have to share living arrangements with younger family members. This is true especially if the old person is poor and the pooling of incomes in a household provides a better standard of living. Also, the physical quality of housing could be superior when the older person lives with a relative, especially in a household headed by a younger person who has more or better resources to look after the home than an elderly person living alone. Physical illness or disability of the elderly may also be another factor favouring co-residence.

Bereavement in old age

The quality of life of an aged may also be affected by the loss of the spouse in old age after several decades of living together. Especially in Malaysia, as in many Asian and other traditional societies, there is strong dependence upon the husband for emotional and financial security while remarriage of widows is often socially not sanctioned or feasible ; hence, the experience of widowhood in such situations could be quite traumatic even if the couple had not been very close. Greater life expectancy is not experienced equally by both sexes for females generally tend to outlive their male counterparts. As men tend to marry women younger than themselves, the operation of this and the former factor result in an increasing incidence of widowhood with advancing age. The fact that women now tend to live longer than men than before also implies that more of their surviving years are spent in widowhood which may be an unpleasant experience due to the factors mentioned. In 1980, more than 4 out of every 10 women aged 60-65 were reported to be widows compared to 1 out of every 5 between 50-54 years. For women aged 65 and older, 60.9 or nearly 3 out of every 5 were reported to be widowed compared to only 17.2 for men (Khoo,1982). This differential incidence between elderly women and men reflected the greater remarriage oppportunities for for elderly widowers.8

Effect on younger female family members

In Malaysia, as more women are educated, enter the labour force and spend most of the day outside the home, there are serious implications for both those who look after the aged and the aged themselves. Traditionally, women play an important role in looking after aged family members as well as children, sick relatives and husbands. Despite modernization, the care providing role of women has not changed substantially. As multi-generational families become more common in consequence of population ageing, there may be pressures for some women to sacrifice their careers at considerable costs to themselves not purely in monetary terms but also to their self-esteem and social involvement. Where the women attempt to reconcile both the care-providing roles with outside employment, they may not be very successful and the results could be quite severe pressures upon themselves and lack of satisfactory care for the elderly.

And, in several instances, a situation not uncommon nowadays develops where the aged relative has to be abandoned to look after themselves, put into nursing homes or other institutions that are sometimes far from ideal. Thus, under these circumstances there is a deterioration in the quality of life for the people affected by the effects of increased longevity.

Old age care and support

Then,too, fertility decline, if it is sustained or accelerate , can affect old age care and suport, especially the possibilit of aged persons having to be institutionalized o being neglected in their old age. In an American study by Soldo and Myers (1976), it was shown that each additional child ever born reduces the probability that a person would live in an institution. That this possibility is not remote even for Malaysia could be reasonably inferred from the fact that Malaysian society has and is rapidly changing under the impact of modernization, industrialization, urbanization and westernization which have tended to undermine and modify traditional family structures and roles, as well as enhance individualistic norms a

Parent-progeny ratio

State	1970	1980
Johor	0.2069	0.2435
Kedah	0.1893	0.1963
Kelantan	0.2140	0.2397
Melaka	0.2253	0.2624
Negri Sembilan	0.2177	0.2652
Pahang	0.1914	0.2225
Pulau Pinang	0.2023	0.2358
Perak	0.2001	0.2372
Perlis	0.2230	0.2325
Selangor	0.1823	0.2078
Terengganu	0.1898	0.2041
Wilayah Persekutuan	-	0.2041
Peninsular Malaysia	0.1996	0.2313
Sabah	0.1353	0.1383
Sarawak	0.1746	0.2162
Malaysia	0.1935	0.2315

(Source: Computed from 1970 and 1980 censuses)

Table 5 : Parent progeny ratio, Malaysia, state and total, 1970 and 1980

the expense of the family nd as tudies have shown weaken the tatus of the aged in soci ty in general and within the family in articular (e.g. Cowgill nd Holmes,1972). Even if the tradi-

tional Malaysian cultural norm of caring for the old remains strong, there are pressures exerted by a reduction in the number of children in the family. There may be increased demand for public services to either supplement or replace the care and support roles of families for the old under the circumstance outlined, as a decline in the number of children could weaken the physical capacity of the family to care for its aged members. In addition, a decline could occur in the economic resources that were formerly available to poor families as a result of the pooling of resources by several working members.

Using a parent-progeny ratio which compares the number of elderly persons at a particular point in time with some of those in the ages, 35 to 64 years who are likely to be their children (Arriaga and Bannister,1985), the effects of fertility decline in reducing the number of children potentially available to support their aged parents can be demonstrated. In Malaysia, there was a rise in the parent-progeny ratio between 1970 and 1980 from 0.19 to 0.23. In other words, there was a decline from roughly 5 children for every elderly person to nearly 4 children for every such person. The situation is more ominous in Peninsular Malaysia than in Sabah and Sarawak as a whole owing to their different stages or phases of demographic transition. Since different ethnic groups experience different rates of fertility decline and levels of longevity, the parent progeny ratio and prospects of old age care and support by children also vary with ethnicity.9 The situation is likely to worsen for all groups if recent fertility levels are maintained or decline further.

With more old people in the population, although they still form a minority, various other facilities besides health or medical are needed by the aged in society, without which their quality of life would be impaired.10 One particular facility that needs to singled out for mention is the availability of transport, without which the aged could be deprived from making essential trips e.g. to medical care facilities, or life-enriching trips for recreational or social purposes. Those old persons who are well-off, healthy and residentially well located may drive, walk or pay for services as they wish. But for the majority of the aged, public or special system transportation e.g. with barrier free provisions, may be crucial. It remains to be seen whether the country will be able to afford or be willing to pay for the aged.

CONCLUSION

Much ought and has to be done to insure against a progressive deterioration in the quality of life with a progressive improvement in the average span of life in Malaysia. That the length of life does not necessarily equate with the quality of life must be more fully appreciated. Further, positive steps must be taken now by both the young and middle aged of today to influence

policies concerning the present and future state of the elderly. Towards this end, the formation and implementation of a comprehensive Policy for the Aged in Malaysia is timely.

REFERENCES

Arriaga, E. and Bannister, J. (1985), The rapid implications of China's fertility decline, Proceedings of the International Population Conference, Florence,5-12th ,Vol. 2, pp.165-180, International Union for Scientiific Study of Population, Belgium:Liege.

Chan Kok Eng (1982), The Elderly in Peninsular Malaysia: A Neglected Group ?, Kuala Lumpur: Population Studies Unit, Faculty of Economics and Administration, University of Malaya.

Chan Kok Eng (1982), Facilities for the Aged,Seminar on the Aged and Society, Kuala Lumpur: Ministry of Welfare Services

Coale, A.J. (1964), How a population ages or grows younger, in Freedman,R. ed., Population: The Vital Revolution,, Doubleday & Company, New York.

Cowgill,D.O. and Holmes,L. (1972), Aging and Modernization,,New York: Appleton,Century-Crofts

Harasawa, M. (1983), The Future of Gerontology in Japan, Proceedings of Second Regional Congress, Asia-Oceania Region,22-25th January, 1983,,International Association of Gerontology, Sydney.

Hickey, T. (1980), Health and Aging, Brooks/Cole Publ. Company, California: Monterey.

Khoo, T.H. (1982), General Report of the Population Census, 1980, Kuala Lumpur: Statistics Department.

Kwok,K.K. and Ng,M.S. (1983), Fertility and Mortality in Malaysia,Seminar on Current Population Policy and Research in Malaysia, Population Studies Unit,Faculty of Economics and Administration, University of Malaya, Kuala Lumpur.

Newton, M.P. (1980), Environment and Aging, Brooks/Cole Publishing Company, California: Monterey.

National Population and Family Development Board (1985), Socio-economic Consequences of the Ageing of Population in Malaysia, National Population and Family Development Board,Kuala Lumpur.

Norman Aris and Quah Pin Pin (1986), Population trends in Malaysia, 1975-84, Quarterly Review of Malaysian Population Statistics, Statistics Department, Kuala Lumpur.

Nortman, D. (1983), Population and Family Planning Programs,

The Population Council, New York.

Petersen, J.(1984), A Condensed Version of the Next Century, Ambio, Vol. 8(3), pp. 202-205.

Soldo,B.J. and Myers,G.C. (1976), The effects of lifetime fertility on the living arrangements of older women, Paper presented in Annual Meeting of Gerontological Society, cited in Lawton (1980).

United Nations (1985), World Population Prospects: Estimates and Projections as assessed in 1982, New York : United Nations.

Soldo,B.J. and Myers,G.C. (1976), The effects of lifetime fertility on the living arrangements of older women, Paper presented at the annual meeting of the Gerontological Society, New York, cited in Lawton (1980).

Statistics Department (1973), Population and Housing Census of Malaysia, 1970: Age Distributions, Statistics Department, Kuala Lumpur.

Masitah Mohd. Yatim (1985), The Prospect of Ageing of Population in Malaysia, Proc.of Seminar on Socio-economic Consequences of the Ageing of Population in Malaysia, 9-12th May, 1985) ,pp. 27-51, National Population and Family Development Board, Kuala Lumpur.

Moraitis, S. (1978), The Migrant Aged, in Australian Gerontological Society, Ageing in Australia, , Sydney.

FOOTNOTES

1. In 1980, 39.2 % of the Malaysia's total population were below 15 years of age, the same level as India's (United Nations, 1985).
2. It must be stressed that individuals age at differing rates so that chronological definitions of age, which vary according to particular social and national contexts, may not afford an accurate reflection of how "aged' a person is. Any classification of the aged has to be based on arbitrary measures in the absence of better or all encompassing definitions. Also, the aged defined by calendar years is not a homogeneous group and differences e.g.in mobility, morbidity, social integration, needs and problems exist between the "young-old" (60-69), "middle-old" (70-79) and "old-old" (80 and older).

3. For Peninsular Malaysia, the crude mortality rate per thousand fell from 7.9 in 1970 to 6.3 in 1980 and to 5.6 between January and March, 1985. The median male life expectancy at birth rose from 64.5 to 66.7 between 1970-1975 and 1975-1980 respectively, while the equivalent figures for females were 69.7 and 7.20 years (Kwok and Ng, 1983; Statistics Department, 1986).

4. Reflecting this effect of past population momentum, if the United Nations medium variant population projection for Malaysia proves correct, the number of persons between 60-64 years would have increased from 288,000 to 1.568 million (or by 5.44 times) between 1980 and 2025, compared to a cohort of only 194,000 in 1950 (United Nations, 1985).

5. The only exception to this general tendency was Sabah which was known to have experienced massive influx of immigrants from neighbouring Philippines and Indonesia. That this development was a contributory factor in the slight lowering of the median age and the proportion aged 65 and older could be deduced from the decline in the elderly dependency rates,and relatively high CWR of 682.4 per thousand women in 1980, suggesting that many of the immigrants were in the younger and more fertile age groups.

6. Between 1970-1984 the Peninsular Malaysian crude death rate per thousand declined from 22.6 to 13.7 for those aged 50-59, and from 40.5 to 32.6 in the 60-69 age group compared to 86.9 to 71.7 between 70-79 years (Statistics Department, 1986).

7. It may be noted that since the 1960s, Japan, an Asian country influenced by Confucian cultural ethics, especially filial piety, has experienced a steady and marked increase in the percentage of aged persons (65 and older) living alone away from their children (Harasawa, 1983). It is not unlikely that Malaysia where presently the incidence of old people living alone does not appear to be significant (Andrews et al, 1986) would like, other developing Asian countries, also increasingly experience a similar situation to that of Japan due to growing industrialization, modernization and accompanying changes in residential patterns.

8. Ethnic differentials in remarriage opportunities and propensities among elderly males are suggested in the 1980 census figures on current marital status for persons aged 65 and older in Peninsular Malaysia. The respective figures were : 82.0 % for the Malays, 72.5 % for the Chinese and 67.6% for Indians (Khoo, 1982).

9. In Peninsular Malaysia, for instance, in 1980 the highest parent progeny ratio was the Chinese (0.2997), far ahead of the Malays (0.1964) and Indians (0.1882). In 1970, the respective ratios were 0.2617, 0.1748 and 0.1247.

10. For a fuller discussion, see Chan (1982).